

ABSTRACT OF THE DISCLOSURE

The present invention relates to oil-in-water lipid emulsions composed of non-triglyceride oils and solid lipid nanoparticles (SLN) composed of triglyceride or ethyl stearate used as gene transfection agents and drug delivery systems and method for preparing thereof. The present invention also concerns the method of transferring genes or drugs efficiently into cells by using the lipid emulsions and solid lipid nanoparticles. Also the present invention relates to the method of preparing lipid emulsions containing lipophilic or amphiphilic drugs by using squalene or squalane as the core-oil. The present invention also concerns the method of preparing the solid lipid nanoparticles containing lipophilic or amphiphilic drugs by using ethyl stearate as the core-fat.